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*The*  
*ART OF ENAMELING*  
*ON*  
*PORCELAIN*



*By*  
*DOROTHEA WARREN O'HARA*

CONS  
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1912

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By

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D.W. O'HARA.

## PREFACE.

The aim of this book is to help the Ceramic Decorators of America, by presenting a correct kind of decoration by which even the young student can express some beauty with comparatively small effort.

Few Ceramic workers are within easy reach of museums or even good books or photographs to develop the thought and fine feeling so essential to good work. They are struggling along, doing elaborately atrocious things, because the right thing has never been presented to them.

This class of workers I am especially eager to help, not by going into the history of enameling on porcelain, nor by giving formulas for making enamels (the libraries are full of such knowledge), but by suggesting a practical, artistic way of decorating our American china, and also the china brought into this country, with enamels which are very easily procured. The numerous illustrations should be very helpful in showing ways of using enamels. Some of the illustrations are copies and photographs of the best examples of old Chinese and Japanese enameling on porcelain to be found in this country or in Europe, while the others are good examples of present-day work.

DOROTHEA WARREN O'HARA,

132 East 19th Street,

New York City, September, 1912.



**BELLEEK CRACKER JAR, NO. 1.**

This jar is from Lenox Incorporated, Trenton, N. J., after original drawing by Mrs. Dorothea Warren O'Hara. Decoration: Five panels, with bell shape flower in pot. Colorings: Brown, Green and Lavender. Outlining and scribble done in Dark Brown color. Second fire a light tint of Dark Brown color was put over scribble. Flower pot: Brown Enamel. Leaves, Green Enamel, No. 2. Flowers: Lavender Enamel and Dull Violet Enamel.

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## I. INTRODUCTION.

Every ceramic decorator knows something about enamels, but the knowledge of really good enameling on porcelain is a comparatively unexplored field to us.

In ancient times the process of enamel decoration on porcelain was carried to a very high state of perfection. The old Chinese created masterpieces of ceramics which are unsurpassed to-day, and we are told that these wonderful old enamelers had neither our scientific knowledge nor our resources for pure chemical products. However limited their material resources, their patience and perseverance, which we seem in this age not to possess, over-balanced all else.

Sir George C. M. Birdwood in "The Industrial Arts of India" speaks of enameling as the Master Art Craft of the world. This broad assertion includes cloisonne, champleve and painted enamels, both on porcelain and metal.

Cloisonne and champleve are essentially goldsmiths' devices and should not be confused with artistic enameling on porcelain. The old Chinese themselves considered metal a far less noble object for the art of the enameler than porcelain. The metal body however thin, gives out a metallic ring when struck instead of the clear, musical note which distinguishes porcelain.

It is the painted enamels on porcelain with which we have to deal. The term painted enamel is misleading, as the enamel is really floated on and *not* painted on, but the expression "painted enamel" has come to be used to distinguish it from cloisonne and champleve.

What I have said here relative to painted enamels should not be confused with the Limoges enamels of the sixteenth and seventeenth



PORCELAIN BOTTLE, NO. 2.

Decoration: Plum Blossoms. Mei Hua P'ing Period. South Kensington Museum.

centuries, or the old Battersea enamels, both of which were carried over to China and are now spoken of as Canton enamels. These enamels were shaded up and worked over until they lost rank as decorative art. They were stigmatized by the Chinese, from the very first, as foreign art, and never took firm root in their country. The good examples of painted enamel, which are numerous, compare favorably with the old cloisonne and champleve enamel in the splendid decorative quality and effect which result from subordinating the pictorial to the decorative character.

Painted enamel is a spontaneous, direct kind of work, with or without outline, which every ceramic student can accomplish in his own little studio without all the laborious work of making enamels out of ore as the Orientals were obliged to do.

Nowadays the most superior products can be purchased by everyone. Enamels beautiful in color, rivaling the old Chinese pinks, blues, early Egyptian Turquoise and Persian glazes. Also enamels to suit the different kinds of wares, which is most essential as there should always be a perfect agreement existing between the glaze and the enamel.

We have so much at hand to produce good work! Think of the lovely soft glaze wares our American potteries are turning out! Could anything be quite so appropriate as an enamel decoration for Belleek? The creamy glaze affords many ways of expressing great beauty by the application of enamel. Backgrounds may be floated in low relief with design in high relief, large bold flower designs with successive applications of enamel raising the design very high, or dainty little borders with gold dotted backgrounds. Graceful tea



### BELLEEK TEA SET, NO. 3.

Decoration: Hanging baskets of flowers. Baskets: Dark Blue Enamel. Flowers: Pink Enamel, No. 2; Deep Pink Enamel, Light Yellow Enamel, Turquoise Blue Enamel, and Lavender Enamel. Leaves: Green Enamel, No. 1, and New Green Enamel. Tint: Dorothea Blue.

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sets with hanging baskets of fruit and flowers, all worked out with enamels, in fact there is no end to the beautiful ways of using enamel.

Those of us who are situated so we can see fine examples in the Museums and elsewhere are fortunate indeed and should hesitate for that reason, if for no other, before using the kind of decoration some of us do.

In one of Mr. Lewis F. Day's text books, "The Application of Ornament," he speaks of this very kind of decoration as being the only kind at which to aim. In the chapter "Where to stop in Ornament," he says: "However limited the resources of an art, a man knows them, or should know them, when he takes it up. Besides, every medium has its inherent advantages as well as its limits, and it is these which should be turned to account. There is a liquid and transparent quality in water-color, which every water-color painter wishes he could retain beyond the wet stage of his picture. This is just what the china painter can get, without the least trouble, by simply floating on his color with a full brush. Surely, then, that is the kind of thing to aim at, when it is within easy reach; instead of fidgeting it, or stippling it, or dabbing it with cotton wool, to the dull evenness so dear to the commercial mind; or otherwise laboriously seeking effects more easily and much better produced by other means. That loose, juicy, pot-like look is more valuable in ceramic painting than any degree of mere finish, and should be valued accordingly."

This idea of ceramic decoration can be carried out to perfection with these enamels. But before we can express the highest quality of work let us take the trouble to get behind, as it were, the obvious, to what after all is the real thing.



HEXAGONAL PORCELAIN LANTERN, NO. 4.

Decorated in Famille Rose Enamels. Salting Collection.  
South Kensington Museum.

## II.

### SOFT ENAMELS.

The secret of good enamel work is to choose an enamel which suits your glaze. Soft enamels belong to the soft glaze wares, such as Satsuma, Belleek, English China, soft German China, etc., etc., and may be raised in relief as high as desired with the feeling of *true appropriateness* if used on the chinas with which they agree.

Good results with soft enamels have been accomplished by very young students proving that a simple direct method is conducive to better decoration in our studios.

Soft enamels may be floated in high relief for one fire, if the technique has been mastered, otherwise the floating will be nicer by the second application. This is especially true in the case of large backgrounds or big flower designs. For example, No. 5, the Satsuma box with the large white flower, was raised in relief by four applications of enamel. White enamel has always been more difficult to raise in high relief than any of the colored enamels, this difficulty has been entirely overcome by the preparation of a tough, elastic enamel to be used as a foundation for the soft enamel. Reamhite No. 2 is a tough cream white enamel and is very desirable as a foundation for the soft Reamhite, No. 1. By the use of these two enamels this can be accomplished with perfect safety.

As soft enamels on soft glazes may be fired a number of times, there is really no reason for turning out a bad piece of soft enamel work.



**SATSUMA BOX, NO. 5.**

Reamhite Enamel, No. 2, was used for flower for first fire. Reamhite Enamel, No. 1, for second fire. Dull Yellow Enamel for center. Blue Green Enamel for bands and leaves. Satsuma color used for tint.

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Untidy work can be cleaned up and brought out by re-outlining.

If your color harmony has been lost or your design does not hold together, an envelop of color will serve to fix up the work. Sometimes lovely effects are produced by these tones of color:—Warm gray, Satsuma, yellow gray, gray green, or any of the neutral colors are desirable for this purpose. A safe medium to mix color for toning over enamels is Warren's Painting Medium.

Soft enamels may be shaded with color; the center of a flower shaded, or a flower made deeper, also leaves may be shaded with a little violet or ruby if they seem too bright when they come from the kiln.

Care should be taken not to be led astray, as one can carry this shading too far and bring perspective into the design and also produce a labored appearance which destroys the real beauty of enamel decoration. But if the shading is done sparingly and artistically, it sometimes enhances the beauty of the design.

Fine effects are obtained with the soft enamels by floating one color over another and firing hard enough to bring the under color up. For example, green enamel No. 1, floated into a background and dark blue enamel floated on after the green has been fired will produce a wonderfully beautiful effect, the green coming up in form of crystals. A coat of green luster over the whole gives a charming dull effect.

Soft enamels on soft glazes are less difficult to handle than hard enamels on hard glazes. This makes it advisable for students to select soft glaze wares to work on until all *fear* of enamels being so difficult to use successfully, is overcome, and you are the master of the materials.



#### BELLEEK VASE, NO. 6.

This vase is from the New Jersey Pottery Co. (Willet's), of Trenton, N. J. After original drawing by Mrs. Dorothea Warren O'Hara.

Decoration: Five hanging baskets of fruit and leaves, with small sprig design in panels. Leaves: Green Enamel, No. 2. Pineapple: Persian Red Enamel. Large Apples: Dark Yellow Enamel. Dark Apples: Rhodian Red. Small apples in back: Dull Yellow Enamel. Small sprigs: Persian Red Enamel and Green Enamel, No. 2. Small dark panels at top: Persian Red Enamel, with centers of Dark Yellow. Baskets and bands of gold.

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### III.

#### HARD ENAMELS.

Hard enamels are made to fit hard glazes such as hard French, or German china, etc. They should be applied thinly to produce a liquid, transparent effect. If applied in high relief, a fine sense of fitness will be lost. Low relief and even very flat enamel is much more artistic on hard glazes, especially for table ware. Intuitively, one should feel the inappropriateness and loss of fineness of enamel in high relief, on a hard glaze.

Enamels on hard glazes will not always stand repeated firing. This limitation prohibits the same amount of freedom one has with soft enamels on soft glazes. But perhaps this very limitation is for our good. Some of us might be tempted to pile the enamel up until it becomes pasty and loses all semblance of beauty.

Let us aim at precisely what the limits of hard enamel will allow us to do and not waste our energies by striving after something impossible and even ugly, by going beyond the boundaries of this field of the most fascinating kind of ceramic decoration.





**FRENCH CHINA BOWL, NO. 7.**

Decoration: Sprig and panel design of apple blossom. Blossom and leaves in panel and inside band done in Sevres Blue Enamel. Background, inside band leaves and stems of sprigs, done in Rouen Blue Enamel. Sprig blossoms: Sevres Blue Enamel. The center of all the blossoms done in Dull Blue Green Enamel.

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## IV.

### FLAT ENAMELS.

The term Flat Enamel means a color made translucent by adding glaze. These glazes are soft enamel bodies, and when mixed with color and applied thinly, produce a liquid quality which has the effect of under-glaze, and is very desirable for hard glazes.

The proportion of glaze added to color varies according to color. Some colors are more transparent than others and naturally require less glaze, but the general rule is to add one part glaze to four parts color.

Waterloo glaze is the softest of all the glazes and can be used with all colors. The usual amount of this glaze to color is one part glaze to five parts color. As Waterloo glaze is a light blue gray violet in color it has a tendency to give a little tone of gray to all the color with which it is mixed. This is very desirable for many things, but when a clear yellow, pink, blue or green is wanted, the glaze to match the color should be used.

Many lovely old-fashioned pinks are made from ruby. A quaint old magenta pink, made with five parts ruby and one part



**APPLE DESIGN, NO. 9.**

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Waterloo glaze is useful with dull blues and greens in doing little sprig designs such as example No. 8.

Example No. 9. The plate with the little apple design was carried out in flat enamels. Albert yellow for the light apple, yellow brown for the dark apples and apple green for the leaves and inside band. Royal blue for the little mounds, and the band on edge. To the yellow, yellow brown and apple green, soft yellow glaze was added as follows: one part glaze to four parts color. To the Royal blue, Waterloo glaze was added as follows: one part glaze to four parts color. Dainty, refined designs should be selected for flat enamel as the enamel is applied very thinly and is not an appropriate medium for working out heavy designs with backgrounds.



SPRIG DESIGN, NO. 8.



**SOFT GLAZE JAPANESE BOWL, NO. 10.**

Old Egyptian Turquoise Enamel for flowers. Dark Blue Enamel for leaves and bands.

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## V.

### MIXING ENAMELS.

Place your enamel on a very clean ground glass slab. Add enough Warren's enamel medium to gather together, and thin with a good quality of turpentine (observe that the turpentine is not oily), fat oil which comes from turpentine often causes the enamel to blister.

Some enamellers use fat oil to gather the enamel together and thin out with turpentine. This is not a good method. The application of enamel mixed in this way is much more difficult and nothing like as safe. For this reason I recommend the above named medium. Dresden thick oil and fat oil are dangerous oils for a beginner.

Great care should be taken in the mixing of enamels. A person who puts no thought into his work is most likely to have his enamels come from the kiln blistered from oily turpentine, or full of pit holes from too little grinding, and then wonder why his enamels are not good, when he has not even made sufficient effort to see that his slab, palette knife and muller for grinding are clean and free from lint. Enamel should be ground until creamy. It is much easier to float when thoroughly ground and certainly looks better when fired. After your enamel has been floated on, if it seems inclined to run, you have used too much enamel medium, or your turpentine is oily. Your remedy is to add more enamel, and be sure your turpentine is *fresh*. Enamel should look dull a few minutes after it has been applied, showing it has begun to dry out. If it retains the highly glazed appearance it had when first applied, you have not mixed it properly. A little experimenting may be necessary before sending your work to the kiln. The use of plenty of good quality turpentine is always advisable and enough enamel medium to have your enamel flow freely from your brush and not dry so quickly that you are unable to float it on with care because of the hurried feeling that it is getting dry.

If we do not exercise these precautions we should not expect proper results.



### SATSUMA CRACKER JAR, NO. 11.

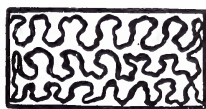
Decoration: All-over pattern. Flowers: Reamwhite, No. 1 Enamel for light part; Lavender Enamel for dark part, and Light Yellow Enamel for center. Leaves: Brown Enamel. Background: Blue Green Enamel. After firing for last time the jar was soaked in the strongest black tea for four days to bring out the crackle of the Satsuma, and to also give it a very old appearance. It is recommended by some that Satsuma should be *boiled* for several hours, but experience teaches that better results are attained by soaking for several days.

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## VI.

### APPLICATION OF ENAMEL.

The technique of floating enamel is simple when one understands that enamel is not painted on but really FLOATED on with a full brush. A Japanese enameler once said, "Floating enamel is just a little trick," and so it is, but nevertheless it sometimes takes successive efforts before it can be acquired. A No. 1 or No. 2 china outlining brush is a desirable brush for most work. A large brush may be used for large backgrounds. Enamel should be taken up with the point of the brush and floated gently over the china. A short, wavy stroke is best. I will endeavor to show the technique by filling the little square with short, wavy lines to illustrate the movement of the brush.



Do not permit your brush to get clogged with enamel; wash it thoroughly every little while and you will be able to take up a full brush of enamel each time and have it flow smoothly from the brush, that is, if your enamel is kept thinned out to the creamy mixture.



**SOFT GLAZE JAPANESE BOWL, NO. 12.**

Large flower, background of panels, and background of inside band, done in Dark Blue Enamel. Flower in panels and inside band, as well as center and rim of large flower, done in Pink Enamel, No. 1. Leaves: Green Enamel, No. 1.

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## VII.

### OUTLINING ENAMELS.

Some of the most beautiful enamel work is done without outline, that is to say, a fired-in outline. To be sure, the design may have been planned with pencil or pale India ink, which fired away. Lovely little sprig designs and bold free things are put in in this way working quickly and directly. Geometrically conventional designs should be well outlined if you wish them to stand out from the background.

Good outlining is absolutely essential to good enamel work. Conversely, it is quite natural to suppose that poor outlining results in poor work and would spoil the most beautiful enamel work possible to be done. Your design should be perfectly outlined with **OUTLINING BLACK** and fired before floating in the enamels. If your enamel has run over the outline in places, fix it up before sending it to the kiln. The outlining black should be gathered together with Warren's Painting medium (not enamel medium) and thinned with turpentine. A drop of Warren's Outlining Medium should be added, especially if the outlining is to be done with a pen. This medium keeps the color open and makes it flow freely from the pen.





**SMALL FRENCH CHINA FERN DISH, NO. 13.**

Decoration: Flower in pot. Flat Enamels. Flower pots, narrow panels and tendrils, done in Royal Blue color and Turkish Blue color mixed in equal parts, with one-fifth Waterloo Glaze added. Flowers: Dark Yellow color, four parts, and one part Soft Yellow Glaze mixed. Leaves: Yellow Green color, four parts, and one part Blue Glaze.

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## VIII.

### FIRING ENAMELS.

There are no great difficulties in successfully regulating the firing of enamels if one is clean and careful about stacking the kiln, and then watchful about turning the fire off at the right time.

Soft enamel should not be fired higher than a gold heat, if applied thinly, otherwise the enamel loses by sinking into the glaze and will require another application of enamel to bring it out. The higher soft enamel is raised in relief the more heat it requires.

If soft enamel comes from the kiln dull and is not smooth to the touch, it is underfired and should be fired again. This time rather hard, as an underfired enamel needs more heat to bring it out than it would require, had it not been underfired.

Soft enamels on soft glazes may be fired a number of times without fear of chipping off, but after the third fire they lose some in brilliancy. Three applications of enamel should be enough to raise any design as high in relief as any one should care to have it.

Hard enamels require a good gold heat if they are to be fired but once. If you wish to tone with color or add more enamel you should rather underfire until the last fire to prevent chipping off, which sometimes happens when the glaze is very hard.

The cone system is good for firing enamels. There is a cone for soft enamel, which is gold heat and a cone for hard enamel which



#### SIX SIDED BELLEEK BOWL, NO. 14.

This bowl is from Lenox Incorporated, Trenton, N. J., after original drawing by Mrs. Dorothea Warren O'Hara.

Decoration: Basket of fruit. Baskets: Manchu Blue Enamel. Grapes: Green Enamel, No. 1. Pomegranite: Dark Yellow Enamel for outside, Manganese Enamel for inside, and Dark Yellow Enamel for seeds. Orange: Rhodian Red Enamel. Apple, Blue Green Enamel. Small apple back of grapes: Dull Yellow Enamel. Large Apple: Dull Yellow Enamel. Leaves: Green Enamel, No. 1, and New Green Enamel. Small panels and top and bottom of bowl, in black color with little design of grape leaves, done in Green Enamel, No. 1, and New Green Enamel.

This design copyrighted 1912 by Dorothea Warren O'Hara.

is a little more than gold heat. A hard enamel applied thinly really requires the same heat as a soft enamel applied in high relief. But the china painter who understands his kiln, the hot places and the cool places, does not need the cone system for accuracy.

It might be well to state here that it is possible in this present day of progress to procure kilns equipped for either oil or gas that have perfectly even distribution of heat and the china decorator, whether working in enamels or not, can make no better investment than to obtain such a kiln if he is eager to work out something really good in ceramic work.





**GERMAN CHINA TOBACCO JAR, NO. 15.**

Decoration: Poppy motive. Entire design carried out in Rouen Blue Enamel.

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## A Word about the Warren-O'Hara Colors and Enamels

THESE products are the culmination of twenty years' experiment and experience by Dorothea Warren O'Hara.

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These enamels, if properly applied, positively **will not chip, blister or peel.** The colors develop uniformly during firing.

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132 EAST 19th STREET  
New York City





**SATSUMA TOBACCO JAR, NO. 21.**

Decoration: Iris. Flower: Reamhite No. 1 Enamel for light part and Lavender Enamel for dark part. Leaves: Green Enamel No. 2. Background: Dark Blue Enamel.

This design copyrighted 1912 by Dorothea Warren O'Hara.





**SATSUMA BOWL, NO. 18.**

Decoration: Persian motive. Done in Dark Blue Enamel, and Blue Green Enamel.

This design copyrighted 1912 by Dorothea Warren O'Hara.





INDIVIDUAL BREAKFAST SET, NO. 22.

Flat enamels. Described in Example No. 9 in book.

Design copyrighted 1912 by Dorothea Warren O'Hara.





### BELLEEK PITCHER, NO. 16.

This pitcher from New Jersey China Pottery Co. (Willett's) of Trenton, New Jersey. After original drawing by Mrs. Dorothea Warren O'Hara.

Decoration: Six hanging baskets of fruit and leaves. Baskets, bands and panels done in Brown Enamel. Panels at top and bottom, also handle, tinted with Satsuma color. Leaves: Blue Green Enamel. Pineapple: Persian Red. Large dark apples: Dark Yellow Enamel. Large light apples: Light Yellow Enamel. Small dark apples: Rhodian Red. Pears: Dull Yellow Enamel.

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### FRENCH CHINA FERN DISH, NO. 20.

Decoration: Baskets of fruit and flowers. Done in Flat Enamels. Flat Enamels are made by mixing glaze with color; note proportions. Baskets, Leaves, Stems, Large Apples and Grapes are all done in Apple Green color, five parts to one part Gray Green Glaze. Flowers and Pomegranates. Dark Yellow color, four parts and one part Soft Yellow Glaze. Pineapples, Kawmo color, four parts to one part Soft Yellow Glaze. Tint on fernery is made of Copenhagen Gray color three parts, to one part Pearl Gray color.

This design copyrighted 1912 by Dorothea Warren O'Hara.





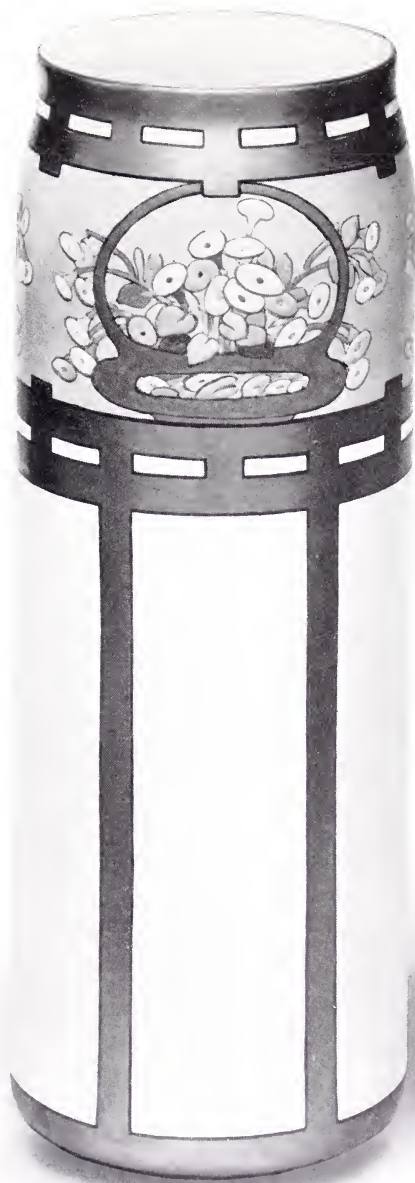
**LARGE SATSUMA BOWL, NO. 19.**

(Diameter at top,  $12\frac{1}{2}$  inches, bottom,  $8\frac{1}{2}$  inches, height,  $4\frac{1}{4}$  inches.)

Decoration: Peacock tail motive and quaint flower combined. Enamels used in Peacock Tail: Dark Blue, Blue Green, Green No. 1, Old Egyptian Turquoise Blue, and Dull Violet. Flowers: Pink No. 1 and Pink No. 2 Enamels. Leaves: Green No. 1 and New Green.

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**BELLEEK VASE, NO. 17.**

Baskets of flowers: Baskets: done in Dark Blue Enamel. Flowers: done in Pink, No. 2 Enamel, Deep Pink Enamel, Light Yellow Enamel, Dull Yellow Enamel, Lavender Enamel, Dull Violet Enamel, Turquoise Enamel, and Old Egyptian Turquoise Enamel. Leaves: Green No. 1 Enamel, Green No. 2 Enamel and New Green Enamel. Stems: same as leaves.

Only the baskets and flowers are done in enamels, the other decoration is gold, with tint of Dark Brown color behind flowers.

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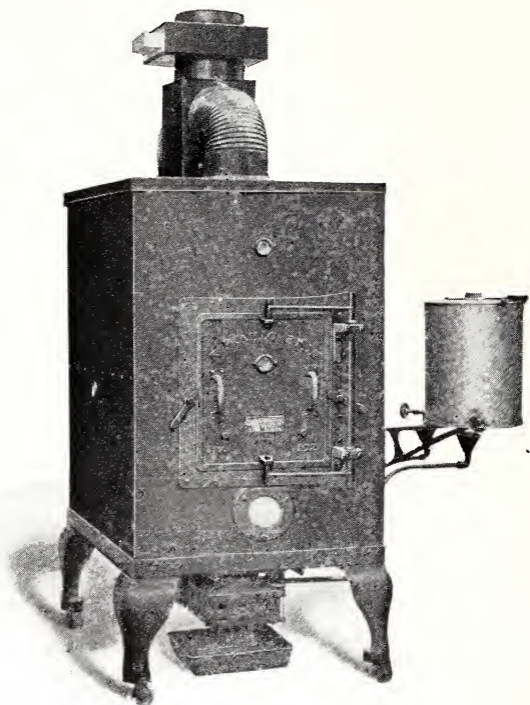
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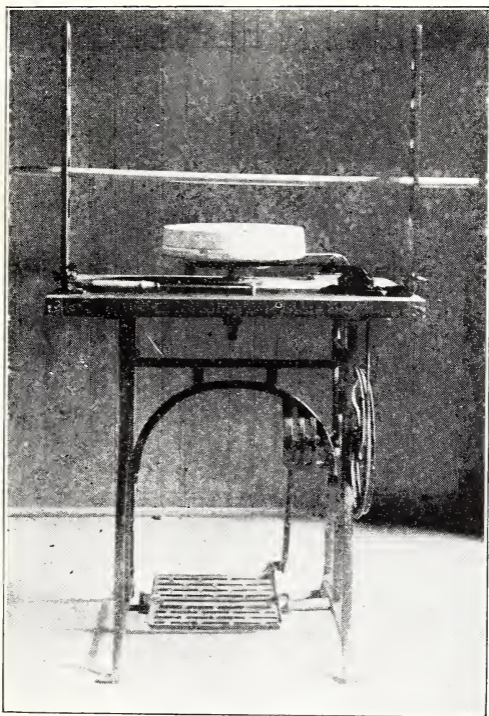




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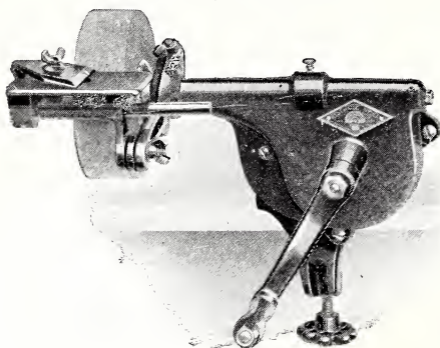
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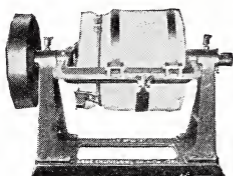
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Nos. 1 and 2 will grind from  $\frac{1}{4}$  oz. to  $1\frac{1}{2}$  lbs. of color at a time.

Jars only for Nos. 1 and 2.....\$ 7.25

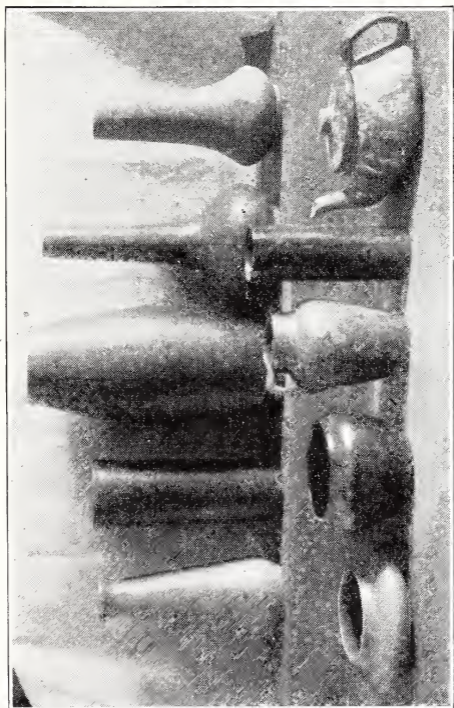
Little Trojan Mill, single jar. Per piece... 30.00

Will grind from  $\frac{1}{4}$  to 5 lbs. of color at a time.

# CLAYCRAFT POTTERY

For still-life studies and home and school decoration.

Special sets made to order.



Set No. 1.....\$12.00

## PREPARED COLORED GLAZES

Ready for use, to be mixed with water to the consistency of cream, then lanned.

These glazes require a heat of about 1050 degrees centigrade, cone 05 down.

No. A.G.	GLOSS GLAZES	Per lb.
1	Clear .....	\$0.40
2	Blue, Light .....	.50
3	Blue, Dark .....	.50
4	Blue-Black .....	.50
5	Brown, Light .....	.50
6	Walnut Brown .....	.50
7	Green, Light .....	.50
8	Green, Dark .....	.50
9	Ivory .....	.50
10	Mulberry .....	.50
11	Black .....	.55
12	Yellow, Light .....	.55
13	Yellow, Dark .....	.55
14	White Enamel .....	.55
15	Red .....	.75
16	Rose .....	.75
17	Orange .....	.55

No. A.M.	MATT GLAZES	Per lb.
1	Clear .....	\$0.45
2	Blue, Light .....	.50
3	Blue, Dark .....	.50
4	Brown, Light .....	.50
5	Brown, Dark .....	.50
6	Green, Light .....	.50
7	Green, Dark .....	.50
8	Ivory .....	.50
9	Mulberry .....	.50
10	Black .....	.55
11	Yellow, Light .....	.55
12	Yellow, Dark .....	.55
13	White .....	.50
14	Red .....	.75
15	Rose .....	.75
16	Orange .....	.55

Special glazes made to order.

## GLOSS ENAMELS

No. A.E.		Per lb.
1	Blue, Light .....	\$0.75
2	Blue, Dark .....	.75
3	Brown .....	.75
4	Yellow .....	.75
5	Green, Light .....	.75
6	Green, Dark .....	.75
7	Rose .....	1.50
8	Pink .....	1.00
9	Turquoise .....	1.00
10	Brown .....	.75
11	Purple .....	1.00
12	Lilac .....	1.00

## UNDERGLAZE COLORS

No. U.G.		Per oz.
1	White .....	\$0.20
2	Black .....	.20
3	Blue, Light .....	.20
4	Blue, Dark .....	.20
5	Brown, Light .....	.15
6	Brown, Dark .....	.15
7	Green, Grass .....	.15
8	Green, Apple .....	.15
9	Yellow, Light .....	.15
10	Yellow, Dark .....	.15
11	Orange .....	.15
12	Rose, Alpine .....	.30
13	Red .....	.30
14	Turquoise .....	.25
15	Lilac .....	.25

Sample collection of the above underglaze  
 colors .....3.00

## CLAYS

Moist Potters' Clay, per bbl., 400 lbs.....	\$10.00
Moist Potters' Clay, 25 to 200 lbs., per lb....	.03
Moist Modeling Clay, per bbl., 400 lbs.....	10.00
Moist Modeling Clay, 25 to 200 lbs., per lb..	.03
Moist Terra Cotta Red Clay, per lb.....	.03
Dry Powdered Modeling Clay, 5-lb. bags...	.25
Dry Powdered Potters' Clay, 5-lb. bags....	.25
Prepared White China Clay, per lb.....	.10

The above clays will not crack in drying or firing.

No. 1 High Temperature Fire Clay (for mending muffles), per lb.....	\$0.15
No. 2 Sagger or Muffle Clay, per lb.....	.05
No. 3 Fire Clay, per lb.....	.03
No. 4 High Fire Cement (for mending kiln linings), per lb.....	.10
Asbestos Cement, 100-lb. bags.....	2.50

## COMPACT MODELING WAX

1-lb. containers, per lb.....	\$0.55
5 and 10-lb. containers, per lb.....	.50
100-lb. tubs, per lb.....	.48
Pormodello, 1-lb. cans.....	.60

## TOOLS AND SUPPLIES

	Each
Wheel Tools (for plaster or clay), R. & L....	\$0.75
Steel Finishing Tools.....	.05
Boxwood Modeling Tools for wax or clay...	.15
Boxwood Modeling Tools with wire end....	.35
All Steel Modeling Tools for insizing.....	.50
Plaster Finishing Scrapers, 2½-inch.....	.50
Palette Knives, 3-inch blades.....	.40
No. 1 Sable Hair Underglaze Brushes.....	.15
No. 2 Sable Hair Underglaze Brushes.....	.25
No. 1 Camel Hair Glaze Brushes.....	.25
No. 2 Camel Hair Glaze Brushes.....	.25
Enamel Glaze Pans.....	.50
Enamel Glaze Cups.....	.15
No. 1 Silk Finishing Sponges.....	.15
No. 2 Silk Finishing Sponges.....	.25

Glaze Sprayer .....	1.50
Extra Glass Containers.....	.50
White Rubber Gloves, per pair.....	3.50
Bronze Wire Sieve for Lawning Glazes and Clays furnished in 100 mesh.	
6-inches square (for glaze) .....	\$3.00
8 inches square (for clay) .....	4.00
China Marking Pencils, each.....	\$0.15
Pyrometric Cones, Nos. 08 to 01, per doz...	.36
Double Pointed Stilts, Nos. 1 to 8, per gross.	1.25
Double Pointed Stilts, Nos. 1 to 8, per doz...	.12
Double Pointed Stilts, Nos. 9 to 12, per doz..	.25

### STONEWARE JARS

1 gal. for storing glaze, each.....	\$0.25
2 gal. for storing glaze, each.....	.50
10 gal. for storing slip or clay.....	3.50
15 gal. for storing slip or clay.....	5.00
20 gal. for storing slip or clay.....	6.50
Crating extra.	

### PLASTER MODELING PLAQUES

4-inch, each .....	\$0.05
6-inch, each .....	.10
8-inch, each .....	.15
10-inch, each .....	.20
12-inch, each .....	.30
Superfine Plaster, 100-lb. bags.....	3.00
Plaster Parting Dope, per pt.....	.75

Plaster Models and Moulds made to order.  
Prices on application.

Asbestos Cord for tying cemented articles	
ready for firing, per ball.....	\$2.00
Pottery Cement, 4-oz. bottle.....	.30
Sandpaper, Nos. 00 and 0, per doz. sheets....	.30
No. 1 Flexible Ruler, 12-inch.....	.25
No. 2 Flexible Ruler, 18-inch.....	.40
Ceramic Gauge for banding and centering pottery .....	
Porcelain Palette, 7x8 with brush recess....	.75
Porcelain Palette, 4½x2x3 with brush recess	.35

# CLAYS

## WEDGEWOOD MORTARS AND PESTLES

### Guaranteed Acid Proof

3	inches across top.	Capacity 2 oz. ...	\$0.50
4	inches across top.	Capacity 6 oz. ...	.80
5	inches across top.	Capacity 10 oz. ...	1.10
6	inches across top.	Capacity 26 oz. ...	1.30
8	inches across top.	Capacity 56 oz. ...	2.50
10½	inches across top.	Capacity 6 pt. ...	3.00
11½	inches across top.	Capacity 10 pt. ...	4.00
14	inches across top.	Capacity 17 pt. ...	6.50

## METALIC OXIDES, CHEMICALS, ETC.

### For Pottery Industries

Fixed prices cannot be listed for this class of materials, as they are subjected to fluctuation.

Acid, Boracic .....	Iron, Oxide .....
Antimony, Oxide .....	Kaolin .....
Bone Ash .....	Lead, Carbonate .....
Borax, Refined .....	Lead, Red, Dry.....
Chalk, White, Pwd....	Lead, White, Dry.....
Chrome, Oxide, Green.	Magnesia, Carbonate .
Clay, Ball, English....	Magnesia, Oxide .....
Clay, Ball, Tenn.....	Manganese, Oxide ....
Clay, China, English...	Rutile, Powdered .....
Clay, China, Domestic.	Soda, Silicate .....
Cobalt, Oxide .....	Tin Oxide .....
Copper, Oxide .....	Titanium Oxide .....
Felspar, Powdered ...	Uranium, Oxide .....
Flint, Powdered .....	Whiting .....
Gum, Arabic .....	Zinc, Oxide .....
Gum, Tragacanth ....	

## ELECTRIC FIXTURES FOR POTTERY LAMP BASES

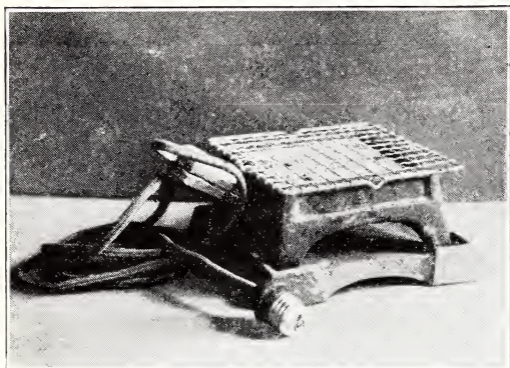
Prices on application.

## POTTERS' THROWING WHEELS POTTER'S KICK WHEELS

Prices on application.

Pottery Vases fitted and wired for electric table lamps.

## ELECTRIC STOVE



A complete electric stove that may be used for toasting or cooking. Made at Lewis Institute in the Pottery Department. Price.....\$4.00

## COMPARATIVE TEMPERATURES

Cone

- 013 Enamel Colors (Regular Kiln).  
Liquid Gold and Silver and Lustres.
- 011 Enamel Colors (Hard Kiln).
  - 07 Majolica Colors and Colored Glazes.
  - 05 Earthenware and English China Glazes.
  - 04 Hard Earthenware Glazes.
  - 03 Easy Earthenware Biscuit.
  - 02 Hard Earthenware Biscuit.
    - 4 Granite Biscuit, Soft Brick Glazes and Stoneware.
    - 7 English China Biscuit, Hard Brick Glaze (Fusing Point of Feldspar).
    - 9 German and Chinese Porcelain (Fusing Point of Cornwall Stone).
    - 12 German and French Hard Porcelain.
    - 14 Sevres Hard Porcelain.
    - 17 Copenhagen Porcelain.

# CLAYS

## PYROMETRIC CONES WITH CORRESPONDING TEMPERATURES

Fusing Point			Fusing Point		
Cone No.	Celsius	Fahr.	Cone No.	Celsius	Fahr.
013	860	1580	4	1210	2210
012	890	1634	5	1230	2246
011	920	1688	6	1250	2282
010	950	1742	7	1270	2318
09	970	1778	8	1290	2354
08	990	1814	9	1310	2390
07	1010	1850	10	1330	2426
06	1030	1886	11	1350	2462
05	1050	1922	12	1370	2498
04	1070	1958	13	1390	2534
03	1090	1994	14	1410	2570
02	1110	2030	15	1430	2606
01	1130	2066	16	1450	2642
1	1150	2102	17	1470	2678
2	1170	2138	18	1490	2714
3	1190	2174			

## PUBLICATIONS

### Instructive and Technical

- \*Potters' Craft. Chas. F. Binns.....\$2.50
- Manual of Practical Pottery. Chas. F. Binns 8.00
- A Treatise on Ceramic Industries. Emile Bourry ..... 6.00
- Grand Feu Ceramics. Taxile Doat..... 5.00
- Book of Cups and Saucers..... 1.10
- Book of Little Things to Make..... 1.50
- Pottery for Artists, Craftsmen and Teachers. Geo. J. Cox..... 2.20
- \*Lunn's Practical Pottery. 2 Vols. (Or sold singly, \$2.65 each)..... 5.25
- Permodello Modeling. Snow & Froehlich... 1.60
- \*Recommended as text-books for Pottery Courses.





# Special Service Department

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**FREE INFORMATION** on any  
pottery problems you may have.

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We will gladly help you in solving your  
Making, Firing and Glazing troubles.

WM. W. WILKINS



**IT'S**  
**Dorothea**  
**Warren-O'Hara's**

That's all you need to know about

**ENAMELS and COLORS**

For Decorating China

**SOFT—HARD—EXTRA HARD**

We could easily put them up to sell at a smaller price, at a greater profit to us, by merely adding certain harmless, and equally worthless, ingredients that cost practically nothing—but we won't.

Our goods measure up to a standard.

They are

**RELIABLE**  
**EASILY APPLIED**  
**SURE OF SUCCESS**

Packed in large, tightly filled vials, this means  
**THE ECONOMY OF THE BEST**

Made **BY** us—Not **FOR** us

**Warren-O'Hara Color Co.**

**132 East 19th Street**

**New York City**

# **DOROTHEA WARREN-O'HARA'S ENAMELS**

**Always the same because made under Formulas**

Twenty years of study and experience have gone into the formulas by which these enamels are made. Their success, efficiency, and certain satisfaction have long since been demonstrated. These Enamels render useless the experiments and uncertainties involved in testing and preparing Enamels. Despite the many formulas given in books and printed in Art Magazines, the ceramic artist who prepares her own enamels is risking time and the value of the piece, with only a slight chance of success. She even takes a greater risk when using the many so-called prepared enamels.

Failure is impossible if the following instructions, as to mixing, are adhered to:

## **MIXING ENAMELS, BOTH SOFT AND HARD**

1. Place your enamel on a clean ground glass slab. Add enough Warren's Enamel Medium to gather together, and thin with a good quality of turpentine (observe that the turpentine is not oily). Fat oil, which comes from turpentine, often causes the enamel to blister.

2. Enamel should be ground until creamy; it is much easier to float when thoroughly ground, and certainly looks better when fired.

3. After your enamel has been floated on if it seems inclined to run, you have used too much enamel medium, or your turpentine was oily.

4. Enamel should look dull a few minutes after it has been applied showing that it has begun to dry out. If it retains the highly glazed appearance it has when first applied, you have used too much enamel medium.

5. Enamel should be thinned out with turpentine to the consistency of cream when ready to float on, and should be floated on with an outlining brush or small water-color brush. A short wavy stroke is used in floating the enamel. Use plenty of turpentine and do not let your brush get clogged with the enamel.

6. Hard enamels on hard glazes are more artistic if applied THINLY, and should never be used otherwise.

FLAT ENAMELS are made by mixing glaze with color. The usual amount is one part glaze to five parts color. Use pink glaze for all pink colors; yellow glaze for all yellow colors, etc., etc. Flat enamels are *not* mixed with Warren's Enamel Medium. Instead use Warren's *Painting* Medium.

The secret of good enamel work is to choose an enamel which suits your glaze. Soft enamels belong to the soft glaze wares, such as Satsuma, Bel-leek, English China, Soft German China, etc., and may be *raised in relief as high as desired* with the feeling of true appropriateness if used on a China with which they agree.

HARD ENAMELS are made to fit hard glazes, such as French, German China, etc., and should NOT be applied in HIGH RELIEF.

## FIRING

**SOFT ENAMELS:** When used on soft glazes may be fired a number of times without fear of chipping off. They should not be fired higher than a gold heat, less the enamel loses by sinking into the glaze. In such an instance another application of enamel is required to bring it out. If soft enamels come from the kiln dull and not smooth to the touch, they are underfired and should be fired again; this time rather hard as an underfired enamel needs greater heat to bring it out than it would require had it not been underfired.

**HARD ENAMELS:** Require a *hard* kiln if they are to be fired but once which is much the better

way, *but* if you wish to tone with color or add more enamel you should rather underfire until the last fire, to prevent chipping off, which sometimes happens when the glaze is very hard.

**FLAT ENAMELS:** Flat enamels made by mixing glaze with colors require about the same kiln as soft enamels.

## Extra Hard Enamels.

(Soft Pastel Shades)

A	Rose Pink.....	30c
B	Yellow No. 1.....	25c
C	Yellow No. 2.....	30c
D	Red.....	40c
E	Light Violet.....	30c
F	Dark Violet.....	25c
G	Baby Blue.....	25c
H	Ming Blue.....	40c
I	Old Blue.....	35c
J	Pastel Blue.....	35c
K	Gray.....	30c
L	Apple Green.....	30c
M	Moss Green.....	35c
N	Emerald Green.....	30c
O	Brown Green.....	25c
P	White.....	20c

## Enamels Ready to Use on Satsuma, Bel- leek, Soft German and English China.

✓ 1	Old Chinese Pink Enamel (soft).....	65c
2	Pink Enamel No. 1 (soft).....	40c
✓ 3	Pink Enamel No. 2 (soft).....	65c
4	Deep Pink Enamel (soft).....	60c
5	Persian Red Enamel (soft).....	65c
✓ 6	Rhodian Red Enamel (soft).....	65c
✓ 7	Light Yellow Enamel (soft).....	40c
8	Dark Yellow Enamel (soft).....	40c
9	Dull Yellow Enamel (soft).....	40c
10	Brown Enamel (soft).....	40c
11	Lavender Enamel (soft).....	40c
12	Violet Enamel No. 1 (soft).....	50c
13	Dull Violet Enamel (soft).....	40c

*✓ Blue violet*

14	Gray Violet Enamel (soft)	40c
15	Old Chinese Blue Enamel (soft)	65c
✓ 16	Dark Blue Enamel (soft)	65c
✓ 16a	Manchu Blue Enamel (soft)	40c
✓ 17	Turquoise Blue Enamel (soft)	30c
✓ 18	Old Egyptian Turquoise Enamel (soft)	65c
✓ 19	Green Enamel No. 1 (soft)	65c
✓ 20	Green Enamel No. 2 (soft)	65c
20a	New Green Enamel (soft)	40c
21	Blue Green Enamel (soft)	65c
22	Manganese Enamel (soft)	65c
23	Reamhite Enamel No. 1 (soft)	30c
24	Reamhite Enamel No. 2 (soft)	30c
24a	Black Enamel (soft)	25c
25	Wareno White Enamel (soft)	25c

*Light Peacock Blue  
Green No 3*

**Enamels Ready to Use on French Porcelain and Other Hard Glaze China.**

26	Pink Enamel (hard)	40c
27	Golden Pink Enamel (hard)	65c
28	Yellow Enamel (hard)	40c
29	Old Yellow Enamel (hard)	65c
30	Lakey Red Enamel (hard)	65c
31	Pale Lilac Enamel (hard)	40c
32	Mauvine Enamel (hard)	50c
33	Sevres Blue Enamel (hard)	40c
34	Rouen Blue Enamel (hard)	50c
35	Cobalt Blue Enamel (hard)	50c
36	Meadow Green Enamel (hard)	65c
37	Light Green Enamel (hard)	50c
38	Neutral Green Enamel (hard)	65c
39	Dull Blue Green Enamel (hard)	65c
40	Wareno White Enamel No. 1 (hard)	25c
41	(Discontinued)	

**Glazes for Underglaze Effects.**

42	Waterloo Glaze	40c
43	Blue Glaze	30c
44	Gray Green Glaze	30c
45	(Discontinued)	
46	Soft Yellow Glaze	40c
47	Pink Glaze	20c

## Miscellaneous.

48 Paste for Raised Gold.....	30c
49 Relief White.....	20c
50 Flux.....	15c

## Mediums.

51 Warren's Enamel.....	30c
52 Warren's Tinting.....	25c
53 Warren's Painting.....	20c
54 Warren's Outlining.....	15c
55 Warren's Raised Paste.....	15c
56 Warren's Gold.....	15c

## Overglaze Colors for Porcelain.

### Yellows.

100 Ivory.....	25c
101 Ivory Yellow.....	25c
102 Lemon Yellow.....	25c
103 (Discontinued).....	
104 Albert Yellow.....	25c

### Browns.

105 Yellow Brown.....	15c
106 Nutter Brown.....	25c
107 Dark Brown.....	25c
108 Rich Brown.....	20c
109 Finishing Brown.....	20c

### Greens.

110 Gray Green.....	15c
111 Apple Green.....	15c
112 Discontinued.....	
113 Golden Green.....	20c
114 Yellow Green.....	25c
115 Brown Green.....	20c
116 Shading Green.....	25c
117 (Discontinued).....	
118 Grass Green.....	20c
119 Dark Green.....	20c
120 Blue Green.....	30c

## **Greens—Continued.**

121 (Discontinued).....	
122 Persian Green.....	20c
123 Celadon.....	25c

## **Reds.**

124 Yellow Red.....	25c
125 Blood Red.....	25c
126 (Discontinued).....	
127 Warhara Red.....	30c
128 (Discontinued).....	
129 Carnation.....	20c
130 Pompadour.....	20c

## **Specials.**

131 Kawmo.....	35c
132 Satsuma.....	65c

## **Violets.**

133 Violet.....	40c
134 Blue Violet.....	40c

## **Rubys.**

135 Ruby.....	75c
136 Warren Crimson.....	80c

## **Pinks.**

137 Pink No. 1.....	25c
138 Pink No. 2.....	25c
139 Rose (hard fire).....	50c

## **Blues.**

140 Dorothea Blue.....	35c
141 (Discontinued).....	
142 Royal Blue.....	75c
143 (Discontinued).....	
144 Copenhagen Blue (Warren spec.).....	40c
145 (Discontinued).....	
146 Banding Blue.....	25c
147 Holland Blue.....	20c

### Grays.

148	Pearl Gray	25c
149	Yellow Gray	25c
150	(Discontinued)	
151	Copenhagen Gray	25c
152	Dark Gray	20c

### Blacks.

153	Black	20c
154	Outlining Black	30c
155	Hard Black	20c

### Matts.

156	Matt Old Ivory	25c
157	Matt Bronze Green	25c
158	Matt Wedgwood Blue	25c
159	Matt Red	25c
160	Matt Pink	25c

**WE GUARANTEE PERFECT RESULTS AND WILL PROMPTLY REFUND PURCHASE PRICE IF DISSATISFIED. UNDER THIS METHOD OF DOING BUSINESS YOU TAKE NO RISK.**

**February, 1914.**

# Dorothea Warren-O'Hara's ENAMELS

*For Decorating All Kinds of China*

ARE RELIABLE  
EASILY APPLIED  
SURE OF SUCCESS

*Put up in Convenient Litho-  
graphic Containers, this means  
the ECONOMY of the BEST!  
Made BY Us—Not FOR Us!*



Actual Size

**NO** breakage, waste, labeling, cork-  
ing, or trouble to fill. Because of this and  
the tremendous difference in time saved  
over packing in vials, we are able to give  
more material for same price, making our  
line the most *economical* when quality  
is considered.

The containers are not filled to the top,  
because nine out of ten would spill con-  
tents in opening, hence we had them  
made larger.

*We guarantee perfect results and will  
cheerfully and promptly refund pur-  
chase price if dissatisfied.*

WARREN-O'HARA  
COLOR COMPANY  
NEW YORK CITY, N. Y.

## Dorothea Warren-O'Hara's Enamels

**T**WENTY YEARS of study and experience have gone into the formulas by which these Enamels are made. Their success, efficiency, and certain satisfaction have long since been demonstrated. These Enamels render useless the experiments and uncertainties involved in testing and preparing Enamels. Despite the many formulas given in books and printed in Art Magazines, the ceramic artist who prepares her own Enamels is risking time and the value of the piece, with only a slight chance of success. She even takes a greater risk when using the many so-called prepared Enamels.

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2. Enamel should be ground until creamy; it is much easier to float when thoroughly ground, and certainly looks better when fired.

3. After your Enamel has been floated on, if it seems inclined to run, you have used too much Enamel Medium, or your turpentine was oily.

4. Enamel should look dull a few minutes after it has been applied, showing that it has begun to dry out. If it retains the highly glazed appearance it has when first applied, you have used too much Enamel Medium.

5. Enamel should be thinned out with turpentine to the consistency of cream when ready to float on, and should be floated on with a red sable brush, known as "China Liner No. 2." A short wavy stroke is used in floating the Enamel. Use plenty of turpentine and do not let your brush get clogged with the Enamel.

6. Hard Enamels on hard glazes are more artistic if applied **T H I N L Y**, and should never be used otherwise.

## WARREN-O'HARA COLOR COMPANY

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The secret of good Enamel work is to choose an Enamel which suits your glaze. Soft Enamels belong to the soft glaze wares, such as Satsuma, Belleek, etc., and may be **raised in relief as high as desired**.

HARD ENAMELS are made to fit hard glazes, such as French, German China, etc., and should be applied in very low relief.

### FIRING

SOFT ENAMELS: When used on soft glazes may be fired a number of times without fear of chipping off. They should not be fired higher than a gold heat, lest the Enamel loses by sinking into the glaze. In such an instance another application of Enamel is required to bring it out. If soft Enamels come from the kiln dull and not smooth to the touch, they are underfired and should be fired again; this time rather hard as an underfired Enamel needs greater heat to bring it out than it would require had it not been underfired.

HARD ENAMELS: Require a **hard** kiln if they are to be fired but once, which is much the better way, **but** if you wish to tone with color or add more Enamel you should rather underfire until the last fire, to prevent chipping off, which sometimes happens when the glaze is very hard.

FLAT ENAMELS: Flat Enamels made by mixing glaze with colors require about the same kiln as soft Enamels.

*Always the  
same because made  
under formula*

**Soft Enamels**  
**Ready to Use on Satsuma, Belleek**  
**and All Soft Glaze Ware**

		Revised Prices
S-200	Wareno White (soft) . . . . .	25c 35c
S-201	Reamhite (soft) . . . . .	30c 40c
S-202	Pale Pink (soft) . . . . .	40c 50c
S-203	Blush Pink (soft) . . . . .	65c 75c
S-204	Old Chinese Pink (soft) . . . . .	65c 75c
S-205	Italian Pink (soft) . . . . .	50c 60c
S-206	Gipsy Pink (soft) . . . . .	50c 60c
S-207	Deep Pink (soft) . . . . .	60c 70c
S-208	Light Yellow (soft) . . . . .	40c 50c
S-209	Lemon Yellow (soft) . . . . .	50c 65c
S-210	Old Yellow (soft) . . . . .	65c 75c
S-211	Indian Yellow (soft) . . . . .	50c 60c
S-212	Dark Yellow (soft) . . . . .	40c 65c
S-213	Rhodian Red (soft) . . . . .	65c 75c
S-214	Persian Red (soft) . . . . .	65c 75c
S-215	Deep Lakey Red (soft) . . . . .	65c 75c
S-216	Pale Lilac (soft) . . . . .	40c 55c
S-217	Dull Violet (soft) . . . . .	40c 50c
S-218	Mauvine (soft) . . . . .	50c 60c
S-219	Gray Violet (soft) . . . . .	40c 50c
S-220	Turquoise Blue (soft) . . . . .	30c 60c
S-221	Old Egyptian Turquoise (soft) . . . . .	65c 1.00
S-222	Mountain Blue (soft) . . . . .	50c 65c
S-223	Celestial Blue (soft) . . . . .	60c 75c
S-224	Florentine Blue (soft) . . . . .	55c 65c
S-225	Manchu Blue (soft) . . . . .	40c 65c
S-226	Dark Blue (soft) . . . . .	65c 75c
S-227	Rouen Blue (soft) . . . . .	50c 65c
S-228	Old Chinese Blue (soft) . . . . .	65c 1.00
S-229	Green No. 1 (soft) . . . . .	65c 1.00
S-230	New Green (soft) . . . . .	40c 60c
S-231	Medium Green (soft) . . . . .	60c 75c
S-232	Bright Sea Green (soft) . . . . .	50c 65c
S-233	Blue Green (soft) . . . . .	65c 75c
S-234	Green No. 2 (soft) . . . . .	65c 1.00
S-235	Night Green (soft) . . . . .	55c 65c
S-236	Brown (soft) . . . . .	40c 50c
S-237	Brilliant Black (soft) . . . . .	55c 65c

The above Enamels are for use on **Soft Glaze Ware Only**, and cannot be used on any hard glaze ware with success.

# WARREN-O'HARA COLOR COMPANY

## Hard Enamels Ready to Use on French, German and all Hard Glaze Ware

Revised  
Prices

H-300	White (hard) . . . . .	25c	35c
H-301	Tusken Ivory (hard) . . . . .	40c	55c
H-302	Greenish Yellow (hard) . . . . .	45c	60c
H-303	Yellow No. 1 (hard) . . . . .	30c	40c
H-304	Yellow No. 2 (hard) . . . . .	35c	45c
H-305	Pumpkin Yellow (hard) . . . . .	50c	60c
H-306	Copper Orange (hard) . . . . .	65c	75c
H-307	Gray (hard) . . . . .	30c	45c
H-308	Sunset Gray (hard) . . . . .	60c	75c
H-309	Misty Violet (hard) . . . . .	65c	75c
H-310	Light Violet (hard) . . . . .	30c	40c
H-311	Dark Violet (hard) . . . . .	25c	50c
H-312	Wistaria (hard) . . . . .	65c	75c
H-313	Light Pink (hard) . . . . .	45c	55c
H-314	Rose Pink (hard) . . . . .	30c	60c
H-315	Old Pink (hard) . . . . .	50c	60c
H-316	Coral Pink (hard) . . . . .	60c	75c
H-317	Pomegranate Red (hard) . . . . .	75c	85c
H-318	Moravian Red (hard) . . . . .	40c	60c
H-319	Baby Blue (hard) . . . . .	25c	40c
H-320	Azure Blue (hard) . . . . .	45c	55c
H-321	Pastel Blue (hard) . . . . .	35c	45c
H-322	Persian Turquoise (hard) . . . . .	60c	75c
H-323	Canton Blue (hard) . . . . .	70c	75c
H-324	Ming Blue (hard) . . . . .	40c	55c
H-325	Old Blue (hard) . . . . .	35c	60c
H-326	Deep Indian Blue (hard) . . . . .	65c	75c
H-327	Apple Green (hard) . . . . .	30c	40c
H-328	Spring Green (hard) . . . . .	50c	60c
H-329	Moss Green (hard) . . . . .	35c	45c
H-330	River Green (hard) . . . . .	45c	55c
H-331	Emerald Green (hard) . . . . .	40c	55c
H-332	Olive Green (hard) . . . . .	55c	65c
H-333	Brown Green (hard) . . . . .	25c	40c
H-334	Chinese Green (hard) . . . . .	60c	70c
H-335	Havana Brown (hard) . . . . .	40c	50c
H-336	Strong Black (hard) . . . . .	55c	90c

The above Enamels are for use on French,  
German and

**ALL HARD GLAZE WARE**

WARREN-O'HARA COLOR COMPANY

The Hard Enamels listed on preceding page may also be used on soft glaze ware. They are not intended, however, to take the place of the brilliant soft Enamels invented by DOROTHEA WARREN-O'HARA, and which have made a new note in Ceramic Art.

(When hard Enamels are applied in high relief on soft glaze ware, they require a harder fire than when applied in very low relief on hard glaze ware.)

Special  
Overglaze Colors

The product of DOROTHEA WARREN-O'HARA'S laboratory cannot be obtained except through our Agents or direct from Warren-O'Hara Color Co.

Ivory. . . . .	25c	40c
Satsuma. . . . .	65c	75c
Warren Crimson . . . . .	80c	80c
Dorothea Blue . . . . .	35c	60c
Black. . . . .	30c	60c
Outlining Black. . . . .	40c	90c
(Catalog of full line of Overglaze Colors mailed on request)		

GLAZES FOR UNDERGLAZE  
EFFECTS

Waterloo Glaze . . . . .	40c
Blue Glaze . . . . .	30c
Gray Green Glaze. . . . .	30c
Soft Yellow Glaze. . . . .	40c
Pink Glaze . . . . .	20c

MEDIUMS

Warren's Enamel Medium (Beware of Substitutes) 1 oz., 25c; 2 oz., . . .	40c	1oz. 35c 2oz. 60c
Warren's Tinting Medium, 1 oz., 25c; 2 oz., . . . . .	40c	1oz. 35c 2oz. 60c
Warren's Painting Medium, 1 oz., 25c; 2 oz., . . . . .	40c	1oz. 35c 2oz. 60c
Warren's Outlining Medium (Keeps the color open and enables you to work with pen as well as brush), 1 oz., 25c; 2 oz., . . . . .	40c	1oz. 35c 2oz. 60c
Warren's Raised Paste Medium, 1 oz., 25c; 2 oz., . . . . .	40c	1oz. 35c 2oz. 60c
Warren's Gold Medium (Nothing like it. Has many advantages over any other gold medium), 1 oz., 25c; 2 oz. 40c		1oz. 35c 2oz. 60c

## National Society of Craftsmen

Arts Club Studios

119 East 19th Street, New York

December 18, 1915.

The Committee of Award of the National Arts Club has authorized me to announce that the Life Membership Prize in the National Arts Club has been awarded to:

**Dorothea Warren-O'Hara.**

The decision of the Committee is based not only upon the standard of Mrs. O'Hara's work shown in the present and former exhibitions of the Society, but upon a scrutiny of her work as a whole and of what she has accomplished in the development of her particular craft, KERAMICS.

J. CHAS. BURDICK,

President, National Society of Craftsmen.



## The National Arts Club

New York

Gramercy Park, Manhattan

December 22, 1915.

Mrs. Dorothea Warren-O'Hara,  
132 East Nineteenth Street,  
New York City.

My dear Mrs. O'Hara:

It gives me great pleasure to inform you that at a meeting of the Executive Committee of the Board of Governors held this afternoon, upon the announcement that the award had been made to you as a member of the National Society of Craftsmen, of the Life Membership Prize for which purpose a One Thousand (\$1,000) Bond has been donated, for your meritorious work in Ceramics, you were unanimously elected to Life Membership in the National Arts Club.

Congratulating you as the prize-winner and the Club upon the enrollment of your name in the Life Membership list, believe me,

Sincerely yours,

F. S. LAMB,

Secretary.

